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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,021	07/30/2003	Frank R. Frola	1-24530	7761
4859	7590	06/16/2006	EXAMINER	
MACMILLAN SOBANSKI & TODD, LLC ONE MARITIME PLAZA FIFTH FLOOR 720 WATER STREET TOLEDO, OH 43604-1619			BUNIN, ANDREW M	
			ART UNIT	PAPER NUMBER
			3743	

DATE MAILED: 06/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/630,021

Applicant(s)

FROLA, FRANK R.

Examiner

Andrew M. Bunin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a) because they fail to show control circuit 30 and signal port 38A as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "38 (specification)" and "28 (drawings)" have both been

used to designate pressure sensor. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "36" has been used to designate both a battery and voltage supply. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 7-11, 14, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Smith et al. (US 5558086). Smith et al. disclose a device adapted to be connected to a gas supply apparatus controller 26, device operable to monitor 38 gas usage data (column 15, lines 31-37), and at least one data storage device 34 connected to the gas usage monitor 38 via a microcontroller unit. The storage device 34 is operable to store the gas usage data (column 15, lines 31-37).

As for claims 2-5, the gas usage monitor includes a microprocessor 26 (column 9, lines 34-37) and further wherein the data storage device 34 includes at least one electrically erasable programmable read-only memory chip (column 11, line 57). Smith et al. further disclose a gas usage data that includes a number of operations of the gas supply apparatus during a predetermined time period and the duration of one of the operations during a predetermined time period (column 7, lines 56-64) (column 8, lines 33-36). Smith et al. continue to disclose a data interface connected to a microprocessor 26, the data interface adapted to be connected to a personal computer and operative to download the data stored in the electrically erasable programmable read-only memory chip to a personal computer (column 8, lines 62-67) (column 12, lines 14-28). This data personal computer is inherently capable of erasing the electrically erasable

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programmable read-only memory chip as the data is downloaded (column 10, lines 12-24).

In regards to claims 7-9, Smith et al. disclose the data storage device including a plurality of electrically erasable programmable read-only memory chips (EPROM) and the electrically erasable programmable read-only memory chips are connected to a microprocessor with a serial data bus (SIOP) (column 11, lines 55-61). Smith et al. also disclose a microprocessor that is a data microprocessor and further wherein the gas supply apparatus includes a control microprocessor that is connected to a solenoid valve 52 that is operative to control the supply of gas from the apparatus to a user, the control microprocessor also being connected to the solenoid valve 52 to receive operating data as shown in Figure 17 (column 10, lines 44-46) (column 13, lines 44-58). Lastly, Smith et al. further disclose a microprocessor that is also connected to a solenoid valve 52 and operable to control the supply of gas from the apparatus to a user as shown in Figure 17 (column 13, lines 44-58) (column 14, lines 52-55).

As for claims 10 and 11, Smith et al. disclose a microprocessor that is responsive to a low voltage condition to cease operation whereby battery life is extended (column 6, lines 15-19) (column 11, lines 37-42). Smith et al. inherently disclose data that includes the number of breaths taken by user during a predetermined time period and average breath duration for a time period (column 2, lines 55-58) (column 8, lines 23-25). Since the device of Smith et al. is able to sense every breath and a breathing cycle of a user, it inherently teaches claim 11 and is capable of accomplishing this task.

In regards to claims 14 and 15, Smith et al. disclose a gas supply that includes a cylinder of pressurized oxygen or a liquid oxygen reservoir (column 2, lines 15-22) (column 8, lines 8-11).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al. in view of Mishelevich et al. (US 5363842). Smith et al. disclose everything except a microprocessor includes a sleep mode such that a microprocessor is only active during data collection. However, Mishelevich et al. discloses an inhaler with a microprocessor that includes a sleep mode such that a microprocessor is only active during data collection and the sleep mode being interrupted upon the gas supply apparatus user drawing a breath (column 8, lines 11-15) (column 10, lines 33-36). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the device of Smith et al. with a sleep mode taught by Mishelevich in order to conserve energy.

Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al. Smith et al. teaches everything except a predetermined time period as

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being one minute. However, it is noted that applicant's specification doesn't set forth this feature, as unexpectedly providing any new result unexpectedly solving any new problem in the art over the prior art. Accordingly, the examiner considers the selection of such to be a mere obvious matter of design choice and as such does not patentably distinguish this claim over the prior art, barring a convincing showing of evidence to the contrary.

As for claim 13, Smith et al. doesn't explicitly teach duration of the last breath during a predetermined time period is used as the average breath duration. However, the device of Smith et al. is capable of performing this function due its ability to measure each breath of a patient and using a computer the last breath measured can be labeled as the average breath duration (column 10, lines 28-32). In addition, it is noted that applicant's specification doesn't set forth this feature, as unexpectedly providing any new result unexpectedly solving any new problem in the art over the prior art. Accordingly, the examiner considers the selection of such to be a mere obvious matter of design choice and as such does not patentably distinguish this claim over the prior art, barring a convincing showing of evidence to the contrary.

Claims 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al. The method steps would have been obvious by the use of the device of Smith et al. as outlined in claims 1-15.


Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: US 6691702, US 5755224, US 5495848, US 5626131, and US 5918596

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew M. Bunin whose telephone number is (571)272-4801. The examiner can normally be reached on Monday - Friday, 8 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Bennett can be reached on (571)272-4791. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


AMB
6/12/06


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